Equilibrium Wetting Phenomena: An Overview (Invied)

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An overview of equilibrium wetting phenomena will be given, highlighting the directions of major progress in the last decade. A general discussion of wetting transitions, with a principal focus on the case of long-range forces will be given. First-order and continuous transitions, and the crossover between the two, will be discussed. Examples will be drawn from the case of helium and other systems on weak binding substrates, and the interplay between wetting and superfluid onset will be addressed. Interesting effects of non-planar geometries will be contrasted with the more conventional planar case. Some directions for future exploration will be suggested.